REMARKS/ARGUMENTS

The Office Action of July 25, 2006, has been carefully reviewed and these remarks are responsive thereto. Claims 1-37 and 39 remain pending and allowance of the instant application are respectfully requested.

Claim Rejections Under 35 U.S.C. §103(a)

Claims 1-6, 8-19, 20-26, 28-29, 31-36, and 39 were rejected under 35 U.S.C. §103(a) as being unpatentable over Bertrand *et al.* (U.S. patent No. 6,687,252, hereinafter "Bertrand") in view of Takeda et al. (U.S. Publication No. US 2001/0048686 A1) and further in view of Applicant's admitted prior art (as found in Applicant's specification at paragraph 8). This rejection is respectfully traversed for the following reasons.

Independent claims 1, 8, 20, 28, 31 and 32 all relate to, *inter alia*, a GGSN assigning one of a private network address and a public network address to a mobile station based on information contained in an APN field of a Create PDP Context Request message. The information contained in the APN field is transmitted by the requesting mobile terminal and relates to a request for one of a private network address and a public network address. As recognized in the Office Action, neither Bertrand nor Takeda, either separately or in combination, teaches or suggests such a feature. While Bertrand and Takeda both disclose an APN field, neither one teaches or suggests that the assignment of a private or a public network address is based on information in the APN field related to the request by the mobile station. Neither Bertrand nor Takeda provides any independent motivation or suggestion to combine the use of APNs with the assignment of network addresses in the manner suggested by the Applicant.

Additionally in Takeda, it is the DHCP server that assigns the IP address to the mobile terminal, not the gateway node. P. 6, ¶ 95. Even so, Takeda does not teach or suggest that the DHCP, in allocating IP addresses, evaluates or receives any information contained in the APN relating to the mobile terminal's request for one of a public network address or a private network address. Neither Bertrand nor Takeda provides any independent motivation or suggestion to combine the use of APNs with the assignment of network addresses in the manner suggested by the Applicant.

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Paragraph 8 of Applicant's Background of the Invention does not remedy these deficiencies in Bertrand and Takeda. Paragraph 8 describes the use of a Network Address Translator (NAT). A NAT is used when a host that is assigned to a private address within an administrative domain intends to send an IP address (and possibly other selected fields within the datagram) into a public IP address prior to the IP datagram being sent outside the administrative domain associated with the NAT. A NAT transforms a private IP address (and possibly other selected fields within the datagram) into a public IP address prior to the IP datagram being sent outside the administrative domain associated with the NAT. Similarly, when an IP datagram is sent from a host that is outside the administrative domain associated with the NAT to a host with a private address, then the NAT transforms a public IP address to a private address.

A NAT does not conserve public IP addresses and simultaneously maintain end-to-end security and application friendliness. Indeed, as explained in paragraph 11 of the present application, there are two major drawbacks to associated with the use of a NAT. The first major drawback is that the NAT-based approach breaks the end-to-end security model by changing the destination address of a datagram and thereby invalidating the authentication header of the datagram. The second major drawback is that certain types of applications cannot work in the presence of a NAT, unless remedial measures are taken, such as the inclusion of an application gateway (proxy). For example when an IP address is embedded into an application protocol unit (PDU), and ALG (Application Level Gateway) is required so that the embedded IP address is changed because a conventional NAT-based address assignment operation will not change the embedded IP address.

As explained in paragraph 12 of the present application, in order to overcome the disadvantages associated with NATs, i.e., the security break and the "unfriendliness" toward some applications, a mechanism commonly referred to as Realm Specific IP (RSIP) has gained significant support within the Internet Engineering Task Force (IETF). As noted in paragraphs 13-17 of the present application, RSIP protocol makes use of a NAT unnecessary, and thereby avoids the drawbacks involving NATs.

In view of the drawbacks involving NATs, and the teaching away of using NATs by using RSIP protocol, one of ordinary skill in the art would not be motivated to incorporate a NAT into a combination of Bertrand and Takeda to provide the present invention. Even if a NAT is

incorporated into a combination of Bertrand and Takeda, the combination of the three references would not result in the present invention. A NAT does not involve a Create PDP Context message having an APN field containing information relating to a request for one of a private network address and a public network address. Rather, a NAT simply transforms a private IP address into a public IP address when a host intends to send an IP datagram to a host that is outside the administrative domain of the sending host.

The Office Action may not use Applicant's invention as a blueprint for combining distinct components/features found in Bertrand, Takeda, and a NAT as described in paragraph 8 of the present application. As such, claims 1, 8, 20, 28 and 32 are allowable for at least this reason.

Claims 2-7, 9-19, 21-27, 29, 30 and 33-37 are allowable for at least the same reasons as their respective base claims and further in view of the novel and non-obvious features recited therein. For example, claims 3, 15, 23 and 33 relate to, *inter alia*, information contained in the APN field of the Activate PDP Context Request message explicitly indicating one of a private network address and a public network address. As discussed on p. 13 of Applicant's specification, the inserted information (in the APN field) relating to whether a public or a private address assignment is desired can be an explicit indication, such as a particular bit (or bits) of the APN field being set, such as is claimed in claims 3, 15, 23 and 33. Neither Bertrand nor Takeda nor a NAT, separately or in combination, teaches or suggests such a feature. The Office Action even admits this deficiency of Bertrand and Takeda. Instead, the Office Action alleges that ¶¶ 26-27, 71-72, and 89-90 of Takeda disclose an "an Activate PDP Context Request message and a Create PDP Context Request message that have an APN field containing information relating to a request for an address." Even assuming the validity of such an allegation, merely containing information relating to a request is distinguishable from containing information in the APN field *explicitly indicating* one of a private network address and a public network address. Significantly, the cited passages only disclose an APN for identifying a gateway node. There is no teaching or suggestion that the APN field includes any explicit indicators of whether a private network address or a public network address is being requested. Claims 3, 15, 23 and 33 are thus allowable for this additional reason.

Claim 39 recites, *inter alia*, "the Activate PDP Context Request message having an APN field containing one or more parameters indicating a type of requested network address, wherein

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the type is one of a private network address and a public network address." Neither Bertrand, Takeda, Applicant's admitted prior art regarding NATs, separately or in combination, teaches or suggests such a feature. Although both Bertrand and Takeda disclose APNs, neither teaches or suggests that the APN contains a parameter indicating a type of requested network address. In fact, nowhere does Bertrand or Takeda disclose that a mobile terminal can request a specific type (i.e., private or public) of network address. Applicant's admitted prior art regarding NATs do not remedy this deficiency in Bertrand and Takeda. Claim 39 is thus allowable for at least this reason.

Claim Rejections Under Boudreaux

Claims 7, 19, 27, 30 and 37 were rejected under 35 U.S.C. §103(a) as being unpatentable over Bertrand in view of Takeda and Applicant's admitted prior art on NAT as applied to claims 1-6, 8-18, 20-26, 28-29, 31-36 and 39 above, and further in view of Boudreaux (U.S. Patent No. 6,466,556. This rejection is respectfully traversed for the following reasons.

Claims 7, 19, 27, 30 and 37 all relate to a GPRS-based communications network that is a Universal Mobile Telecommunications System. The Office Action, on page 16, concedes that Bertrand and Takeda and Applicant's admitted prior art does not disclose such a feature. While Boudreaux may teach a Universal Mobile Telecommunications System, it does not remedy the failure of Bertrand, Takeda, and Applicant's admitted prior art to teach the claimed invention of the independent claims upon which 7, 19, 27, 30 and 37 depend from. As such, claims 7, 19, 27, 30 and 37 are allowable for over the proposed combination of Bertrand, Takeda, Applicant's admitted prior art regarding NAP, and Boudreaux.

CONCLUSION

All rejections having been addressed, Applicants respectfully submit that the instant application is in condition for allowance, and respectfully solicits prompt notification of the same. However, if for any reason the Examiner believes the application is not in condition for allowance or there are any questions, the Examiner is requested to contact the undersigned at (312) 463-5405.

Respectfully submitted,

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By: _____

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